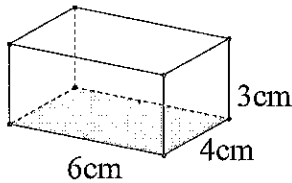


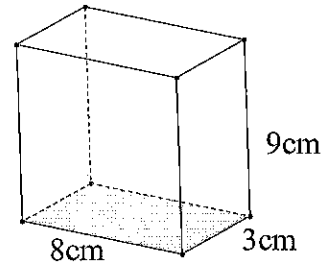
Name Key

Date _____

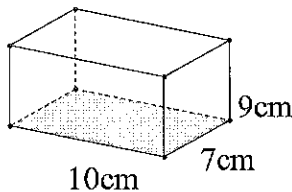
Extra Practice 9.2 and 9.4 B

Please find the following: perimeter of the base = p , area of the base = B , LA, SA, and V.Formulas: LA = ph SA = $LA + 2B$ V = Bh 

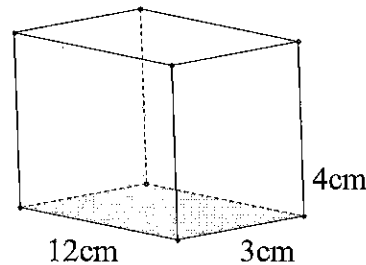
$$\begin{aligned}
 1. \quad p &= 2(6) + 2(4) = 20\text{cm} \\
 B &= 6 \cdot 4 = 24\text{cm}^2 \\
 LA &= 20 \cdot 3 = 60\text{cm}^2 \\
 SA &= 60 + 2(24) = 108\text{cm}^2 \\
 V &= 24 \cdot 3 = 72\text{cm}^3
 \end{aligned}$$



$$\begin{aligned}
 2. \quad p &= 2(8) + 2(3) = 22\text{cm} \\
 B &= 8 \cdot 3 = 24\text{cm}^2 \\
 LA &= 22 \cdot 9 = 198\text{cm}^2 \\
 SA &= 198 + 2(24) = 246\text{cm}^2 \\
 V &= 24 \cdot 9 = 216\text{cm}^3
 \end{aligned}$$



$$\begin{aligned}
 3. \quad p &= 2(10) + 2(7) = 34\text{cm} \\
 B &= 10 \cdot 7 = 70\text{cm}^2 \\
 LA &= 34 \cdot 9 = 306\text{cm}^2 \\
 SA &= 306 + 2(70) = 446\text{cm}^2 \\
 V &= 70 \cdot 9 = 630\text{cm}^3
 \end{aligned}$$



$$\begin{aligned}
 4. \quad p &= 2(12) + 2(3) = 30\text{cm} \\
 B &= 12 \cdot 3 = 36\text{cm}^2 \\
 LA &= 30 \cdot 4 = 120\text{cm}^2 \\
 SA &= 120 + 2(36) = 192\text{cm}^2 \\
 V &= 36 \cdot 4 = 144\text{cm}^3
 \end{aligned}$$

$$5. \quad r = 3\text{cm}$$

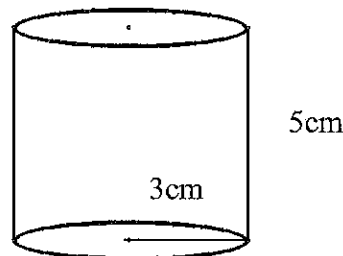
$$p = 6\pi \approx 18.8\text{cm}$$

$$B = \pi 3^2 = 9\pi \approx 28.3\text{cm}^2$$

$$LA = 6\pi \cdot 5 = 30\pi \approx 94.2\text{cm}^2$$

$$SA = 30\pi + 2(9\pi) = 48\pi \approx 150.8\text{cm}^2$$

$$V = 9\pi \cdot 5 = 45\pi \approx 141.4\text{cm}^3$$



6. $r = 10$

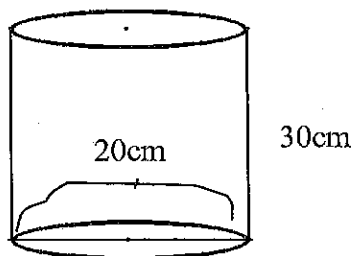
$p = 20\pi \approx 62.8 \text{ cm}$

$B = \pi 10^2 = 100\pi \approx 314.2 \text{ cm}^2$

$LA = 20\pi \cdot 30 = 600\pi \approx 1885.0 \text{ cm}^2$

$SA = 600\pi + 2(100\pi) = 800\pi \approx 2513.3 \text{ cm}^2$

$V = 100\pi \cdot 30 = 3000\pi \approx 9424.8 \text{ cm}^3$



7. $r = 4 \text{ cm}$

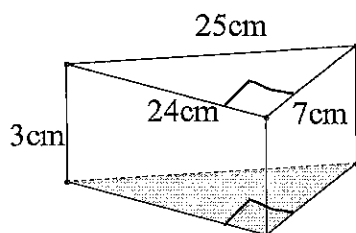
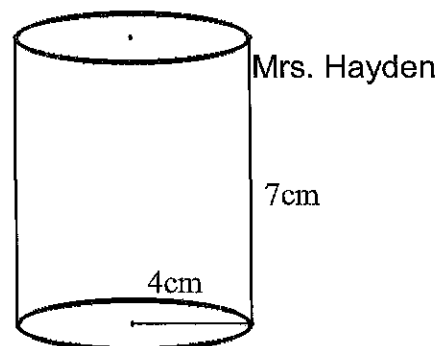
$p = \pi \cdot 8 = 8\pi \approx 25.1 \text{ cm}$

$B = \pi 4^2 = 16\pi \approx 50.3 \text{ cm}^2$

$LA = 8\pi \cdot 7 = 56\pi \approx 175.9 \text{ cm}^2$

$SA = 56\pi + 2(16\pi) = 88\pi \approx 276.5 \text{ cm}^2$

$V = 16\pi \cdot 7 = 112\pi \approx 351.9 \text{ cm}^3$



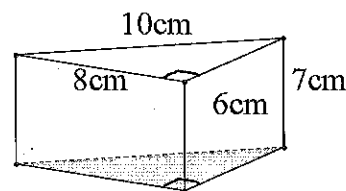
8. $p = 24 + 25 + 7 = 56 \text{ cm}$

$B = \frac{1}{2} 24 \cdot 7 = 84 \text{ cm}^2$

$LA = 56 \cdot 3 = 168 \text{ cm}^2$

$SA = 168 + 2(84) = 336 \text{ cm}^2$

$V = 84 \cdot 3 = 252 \text{ cm}^3$



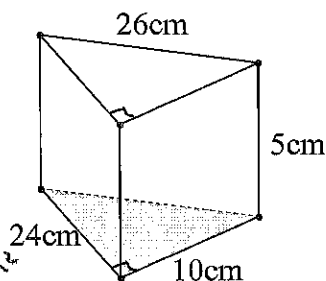
9. $p = 6 + 8 + 10 = 24 \text{ cm}$

$B = \frac{1}{2} 6 \cdot 8 = 24 \text{ cm}^2$

$LA = 24 \cdot 7 = 168 \text{ cm}^2$

$SA = 168 + 2(24) = 216 \text{ cm}^2$

$V = 24 \cdot 7 = 168 \text{ cm}^3$



10. $p = 10 + 24 + 26 = 60 \text{ cm}$

$B = \frac{1}{2} 24 \cdot 10 = 120 \text{ cm}^2$

$LA = 60 \cdot 5 = 300 \text{ cm}^2$

$SA = 300 + 2(120) = 540 \text{ cm}^2$

$V = 120 \cdot 5 = 600 \text{ cm}^3$

11. $p = 9 + 12 + 15 = 36 \text{ cm}$

$B = \frac{1}{2} 9 \cdot 12 = 54 \text{ cm}^2$

$LA = 36 \cdot 8 = 288 \text{ cm}^2$

$SA = 288 + 2(54) = 396 \text{ cm}^2$

$V = 54 \cdot 8 = 432 \text{ cm}^3$

